

Hoboken Piers Headhouse
River Street
Hoboken
Hudson County
New Jersey

HAER No. NJ-63

HAER
NJ,
9-HOBO,
3-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD

HAER
NJ,
9-HOBO,
3-

Hoboken Piers Headhouse

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Location: Fronting the west bank of the Hudson River on the New Jersey shore. The headhouse site is bounded on the north by 4th Street, on the west by River Street, and on the south by Newark Street, in the city of Hoboken, Hudson County, New Jersey

UTM: 18.398550.4448790
Quad: Jersey City, New Jersey-New York

Engineer: Headhouse, Section B-C: Walter F. Whittemore, Member American Society of Civil Engineers

Contractor: Headhouse, Section B-C: R. P. and J. H. Staats Hoboken, New Jersey and New York City

Dates of Construction: Headhouse, Section A: Turn of late 19th century, probably circa 1900-1906, with later alterations.
Headhouse, Section B-C: 1901-1903, with later alterations.

Present Owner: Leased by The Port Authority of New York and New Jersey from the city of Hoboken.

Present Use: Vacant. Last use: operated by The Port Authority as a cargo and shipping terminal from October 1952 to 1975. Port Authority staff occupied offices in Headhouse Section A until 1985, when structural problems required relocation of staff units.

Significance: The Hoboken Piers Headhouse is a remnant of the city's history as an important 19th and 20th century waterfront center along the Hudson River corridor. The headhouse has two historic sections: (1) a part added to the 1883 Hamburg-American Terminal (Section A), which probably dates circa 1899-1904 and 1904-1906, and (2) the 1901-1903 North German Lloyd Terminal (Section B-C), which replaced the company's 19th century buildings and piers destroyed by a disastrous waterfront fire in 1900.

Walter F. Whittemore, a civil engineer who lived and practiced in Hoboken and who worked as a consultant for the Hoboken Land and Improvement Company, designed the North German's terminals and piers. His plans specifically addressed fire control in layout, construction, fireproof building materials, and fire control systems. The design of the North German Lloyd building incorporated the most advanced methods and materials in fire control at the time. The substructure and superstructure designs of the headhouse were planned for strength and durability and designed to resist impact from ships and waves.

Hoboken's waterfront faces the Hudson River and southwest Manhattan. It is significant in 19th and 20th century New Jersey and metropolitan New York land and water transportation history. The headhouse, at the waterfront's south end, is north of the site of Hoboken's 19th and 20th century railroad and ferry terminal, a historic hub of northeastern New Jersey transportation systems.

The headhouse is associated with two German steamship companies, among several who established offices and piers in Hoboken after the mid-19th century. These two companies had important roles in local and national immigration history, particularly in German immigration in the late 19th and early 20th centuries. The steamship companies influenced local social and economic development, as they provided jobs and encouraged a variety of trades and businesses in Hoboken.

The German-owned pier properties in Hoboken were seized by the United States Government in 1917. Because Hoboken was chosen as a major embarkation port for U. S. troops and supplies, the terminals and six existing piers became the center of war-time activities. When the war ended in late 1918, the government did not return the pier properties to the steamship companies. During World War II, the piers became a center for troop and supply shipping.

Project Information:

This documentation was undertaken in June 1985 in accordance with the Memorandum of Agreement among the city of Hoboken, the U. S. General Services Administration, and the New Jersey State Historic Preservation Office, as a mitigative measure prior to demolition of the headhouse.

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Site Context

The Hoboken piers headhouse stands at the edge of the Hudson River, on marshland that was filled in by the middle of the 19th century. The building's length -- 1159 feet along Hoboken's waterfront (including Sections A and B-C) -- is about two-thirds the length of these two early 20th century steamship terminals. These buildings originally stretched from the city's railroad and ferry terminal site to the south edge of the Castle Point promontory. On the upland side, the existing headhouse's main (west) facade runs parallel with River Street, a north-south road that connects Newark and 4th Streets.

The existing headhouse is a long, 2-1/2 story building. Its overall length is uninterrupted for nearly 2-1/2 city blocks, from 4th Street at the north to midway between 2nd and 1st Streets at the south. The neighboring buildings at the immediate west, north, and south are multi-family residential and commercial buildings, three to 24 stories high.

Section A of the headhouse was built at the turn of the 20th century (between 1900-1906) for the Hamburg-American Steamship Company. Section B-C was built as one terminal for the North German Lloyd Company between 1901 and 1903. Although Sections A and B-C have been extensively altered, they are the oldest buildings in the headhouse property.

After the United States seized the German-owned pier properties in 1917, a number of government buildings were erected on the upland between River Street and the headhouse. These included office and storage buildings, a United States Customs building, and the Merchant Marine's YMCA building. The only building that remains is owned by the U.S. Department of Agriculture. It dates to 1940 and is four stories high.

The Port Authority of New York and New Jersey has leased the pier property and buildings from the City of Hoboken since 1952. During the 1950's, the Port Authority modernized the buildings, piers, and the upland area. The property was fenced along the east side of River Street and part of Newark Street's north side. Five gates and brick gatehouses were built along River Street. The depth of the paved parking area between the River Street fence and the west wall (excluding the platform) of Section B-C is 193 feet. In 1955-1956, the Port Authority built a large truck ramp in front of Section B. The ramp curves down from the west facade and into the upland parking area.

The headhouse is vacant and closed. There is daytime commuter parking in the upland area. Pier B was seriously damaged in a recent fire and is closed. Two modern steel and concrete piers, built by the Port Authority in 1955 (Pier A) and 1956 (Pier C), are no longer in marine use. Pier A's superstructure has been removed. On an interim basis, Pier A's deck provides day-time public access to the river. Such access is rare because Hoboken's waterfront is effectively blocked by the headhouse and other industrial buildings and uses.

Historical Background

The City of Hoboken is approximately 1.4 square miles. Hoboken's location -- on the New Jersey (west) shore of the Hudson River, north of Upper New York Bay, directly north of Jersey City and west of downtown Manhattan -- has been very significant in the city's history.

Europeans settled in the marshy Hoboken vicinity as early as the 17th century. Farming was the predominant economic support. Colonel John Stevens purchased the land that is now Hoboken in 1784, and started an era of growth. Stevens had much of the marshland filled in and laid out the streets in a grid that still exists. The 1804 map "A Plan of A Town Plot at Hoboken in the County of Bergen, State of New Jersey" illustrates and anticipates these changes.(1) It maps the streets in orderly rectangles. It also shows the existing shoreline, just east of Hudson Street, and the proposed landfill shoreline, which continues the grid pattern. The "City Map of Hoboken, 1852" shows few changes in the Hoboken shoreline.(2) River Street did not yet exist. Stevens had wharves built along the shore in 1804, in anticipation of the trade and travel he was encouraging in the new town.

The world's first steam ferry began carrying people between Hoboken and southwest Manhattan in 1811. Despite its convenience, business and population growth did not expand to Colonel Stevens' satisfaction. He began to develop Hoboken as a pleasure resort. Stevens' efforts were successful, and New Yorkers vacationed and bought land in the Hoboken area.

Stevens was instrumental in the organization of the Hoboken Land and Improvement Company in 1833. Through this company, the Stevens family directed Hoboken's development in the 19th and early 20th centuries. The company was empowered to buy, sell, and improve lands in Hoboken. It supervised grading and laying out of streets, public spaces, wharves and other features, and planned the waterfront land as an international shipping terminal.

The township of Hoboken was formed and separated from North Bergen in 1849. After 1855, when Hoboken was incorporated as a city, the area rapidly grew as a center of industry and shipping. Hoboken became a terminus for the Erie Railroad and the Delaware, Lackwanna and Western Railroad in the first half of the 19th century. By 1900, these were the largest entry port rail facilities in the United States.

The establishment of several transatlantic steamship companies in Hoboken was a turning point in the city's history and the real beginning of its waterfront industry. It is possible that the Hoboken Land and Improvement Company encouraged the companies to establish docks in Hoboken. Among the lines established in Hoboken in the late 19th century were the North German Lloyd Steamship Company, the Hamburg-American Company, the Netherland-America Steamship Navigation Company, the Scandinavian Line, and the Wilson Line.

The North German Lloyd Line was established in New York City in 1857. Between 1858 and 1861, the Lloyd ships docked at a pier at the west end of Chambers Street, along Manhattan's southwest Hudson River shore. According to company history, the line acquired a landing site in Hoboken in 1861.(3) By 1870, there were several buildings on land at the foot of 2nd Street at the south and 4th Street at the north. Three piers extended east from the site into the Hudson. A site plan illustrated in Der Norddeutsche Lloyd Geschichte und Handbuch (see illustration) shows a building with two entrances. One is for passengers on foot and the other is a courtyard for vehicles.(4) The site plan shows three piers, labeled 1 through 3 from north to south. The first two piers are also labeled "Bremen Docks." These are the piers at which ships from Hamburg and Bremen, Germany, docked. The site plan from Der Norddeutsche Lloyd details functions of the terminal buildings. There was a supply warehouse in the center of the vehicle court, machine repair shops close to the piers, a boiler house, an inspector's house that lodged ship officers, and a garden. The three piers were wood platforms on pilings, each about 600 feet long with a shed superstructure. The only elevation of these structures that could be located was in the 1874 print "Hoboken."(5) Because this print illustrates the buildings from a distance, it is difficult to see the details. The headhouse building appears to be large in massing, three stories high, with a large four or five story pavilion. A large, open plaza is shown south of the North German Lloyd buildings.

The Hamburg-American Line was established in Hoboken in 1863. It shared the "Bremen Docks" with other steamship lines until it purchased land from the Hoboken Land and Improvement Company, and began to build its own terminal and wood piers south of the North German Lloyd buildings at the foot of Newark and First Streets (in the area of the large plaza shown on the 1874 print). The facility was designed by Lederle and Company, a New York City engineering firm established by native Germans. A drawing printed in the Illustrierte Zeitung in 1883 (see illustration) shows the U-shaped Hamburg-American terminal and its two piers.(6) These were completed in 1883. River Street and a carriage plaza bordered the terminal's west facade, and Newark Street bordered the terminal and south pier. (These two piers later became the Line's Piers 2 and 3, when Pier 1 was built around 1900, at the foot of 2nd Street). An inset from this drawing shows that the Hamburg-American piers were built immediately north of the Hoboken ferry slips.

The U-shaped Hamburg-American terminal provided sheltered passenger and cargo circulation between the line's two piers. The architectural style of the terminal and piers reflects influence of the German Renaissance. The Illustrierte Zeitung drawing does not show the "Bremen Docks" north of the Hamburg-American terminal. A photograph taken sometime between 1900 and 1917 of Hamburg-American's Piers 2 and 3 (see illustration) shows that the east end walls of the pier superstructures resembled the terminal's pier entrances.

The North German Lloyd and the Hamburg-American lines owned the world's largest and fastest passenger vessels. Most of their business was bringing passengers from Europe to the United States. The company's presence on the Hoboken waterfront contributed significantly to the city's late 19th century social and economic growth. The lines provided jobs for laborers and businessmen, who lived in the city to be near their work. Many German immigrants settled in Hoboken, and the city became a center of German culture. Between 1870 and 1910, the city's population increased from approximately 20,000 to 70,000. This was a dense population for such a small land area. During these years, the city reached its economic apex; waterfront and upland businesses and industries thrived.

The Hoboken Pier Fire of 1900

The Hoboken pier fire of June 30, 1900 was the city's first great fire and the most destructive one in the history of the lower Hudson ports. Six ships were docked for refueling and supplies at the North German Lloyd and Hamburg-American piers. The fire started in cargo on Lloyd's Pier 3 (the southernmost of the line's piers) and spread north to Piers 2 and 1, fanned by strong winds and fed by flammable materials. Crew members could not stoke the ships' steam engines to escape, so they freed the ships from the piers and allowed them to drift in the Hudson. Because the harbor was crowded with ferries, barges and other boats, a number of vessels caught fire. The harbor was also congested with tugboats and fire/rescue boats that were trying to save the flaming, free-floating vessels. About 400 people died and damage was well over \$4 million. North German Lloyd's three piers and buildings were destroyed.

The Lloyd Lines' ships were docked at New York City piers while the company rebuilt the Hoboken site. By April 1901 the line's southernmost pier, Pier 3, had been rebuilt and was useable. Plans for a new headhouse and piers were commissioned and construction was underway in 1901. The upland building ruins were cleared away.

The new terminal was built in utilitarian, sparsely ornamented, Renaissance Revival style. The terminal and pier designs stressed fire prevention and control and incorporated the most advanced fire technology and fireproof materials at that time. The design was the work of Walter F. Whittemore, a Member of the American Society of Civil Engineers, in consultation with George S. Greene, a member of the same society. Consultants contributing to the fire control technology were Joseph P. Gray, Vice-President of the Boston Manufacturer's Mutual Fire Insurance Company; the New York Board of Fire Underwriters; and Mr. Hugh Bonner, former Chief of the New York City Fire Department. Contractors for the terminal and piers were R.P. and J.H. Staats of Hoboken and New York City. Structural steel for the project was provided by the Pennsylvania Steel Company and the Pencoyd Branch of the American Bridge Company.

Construction of the Lloyd Lines' terminal and piers was nearly finished in 1902, when Pier 2 was used for docking. By 1903, the terminal and Piers 1 and 2 were complete. Temporary Pier 3 was dismantled in 1905 and rebuilt in the same way as Piers 1 and 2. (7). The upland area was enclosed as a passenger and vehicle plaza, with a fence and three gates along River Street.

W.F. Whittemore, Civil Engineer

Walter Frank Whittemore was born on June 12, 1858 in Camden, Maine. He became a seaman, travelled to foreign ports, and by the age of 21 was licensed by the U.S. Government as a sailing master authorized to command steamships.

Whittemore changed his career to engineering and graduated as a civil engineer from New York University (New York City) in 1883. He was appointed instructor at NYU, and finished his master's degree in 1886. He remained an assistant professor until 1887.

While he taught at NYU, Whittemore worked in the office of Charles Brush, located in Hoboken, N.J. He was assistant engineer until 1889, when he was promoted to principal assistant engineer. In 1896 Charles Brush took Whittemore as a member in the firm of Charles B. Brush and Company. When Brush died in 1897, Whittemore maintained the Hoboken business as a consulting engineer.

Charles Benjamin Brush (1848-1897, Member American Society of Civil Engineers) is of interest to the background history of the North German Lloyd's 1901 terminal and pier project. Brush also attended and taught at NYU, beginning as an instructor in 1874 and becoming Dean of the School of Engineering in 1895. Brush formed a partnership with Arthur Spielman at Hoboken in 1869 and kept his New York City residence. The firm of Spielman and Brush worked for a number of Hudson and Bergen County clients, including extensive work for the Hoboken Land and Improvement Company. After Spielman died in 1883, the firm's name became Charles B. Brush and Company. A full-page advertisement in Boyd's 1885-86 Jersey City and Hoboken Directory notes that the firm produced fire insurance maps, surveys, and designs for roads, waterworks, and drainage. The office address was 13 Newark Street, Hoboken.

The connection between Brush's firm and the Hoboken Land and Improvement Company is significant. Because the company was influential in the city's development, it was probably involved in the post-1900 reconstruction of the fire-damaged waterfront. Whittemore took on the North German Lloyd project as heir to Spielman and Brush.

Whittemore's name is noted first in Hoboken city directories in 1885. In this and later directories, until 1918, his occupation was "civil engineer." His Hoboken residential address changed, from 143 Hudson Street in 1885, to 308 Garden Street in 1887, and to 1111 Garden Street in 1893. Some directories also note that Whittemore was employed with Charles Brush.

By 1903, his work address was 1 Newark Street. This is the Hoboken Land and Improvement Company Building, where Whittemore evidently had an office until at least 1918. Whittemore's name does not appear in available Hoboken directories after that year. In the 1918 directory his residential address was Newton, New Jersey.

Whittemore's name and addresses appear in bold type in the 1903 directory. This is the year in which the North German Lloyd project was finished. That year, Whittemore's achievements on the Hoboken waterfront made him a notable figure in the city.

Whittemore specialized in harbor improvements, but also worked on a variety of engineering projects, including waterworks, sewage disposal, railroad and highway bridges. His memoirs credit him with designing terminals and piers for a number of steamship companies "for almost the full length of Hoboken, north of the Lackawanna Railroad Terminal on the Hudson River front. Outstanding among these are piers and buildings of the Holland-American and North German Lloyd Steamship Lines..."(8)

Whittemore joined the New Jersey National Guard, Essex County, in 1897. He reached the rank of Lieutenant Colonel in the Engineering Corps. Whittemore served as a member of the New Jersey State Highway Commission from 1920 to 1923. He rose through the ranks of the American Society of Civil Engineers. He was elected a Junior in 1889, an Associate Member in 1892, and a Member in 1905. Whittemore died on October 27, 1944.

R.P. and J.H. Staats, Contractors

Although The Engineering Record and the Engineering News articles say that the Staats contracting firm is from New York City, Hoboken city directories indicate that the firm had an office in Hoboken. The 1899 Boyd's Hoboken directory lists the service under "contractors," and gives the office address as foot of 11th Street. The 1901 directory provides the same information. The address changed in the 1903 directory to the foot of 3rd Street.

Description: The North German Lloyd Pier Terminal, now Port Authority
Piers Headhouse Section B-C

The headhouse substructure retains its construction configuration. Tides and weather have worn the elements in the splash (pier) area along the east. Documentation of alterations or repairs made to the substructure in the 20th century have not been found, other than repairs made to the Pier 3 (now Pier B) substructure in the 1950's by the Port Authority. The substructure design has proved substantial.

Contemporary description details for the substructure and some superstructure features were drawn from The Engineering Record, December 22, 1900 (9) and from Engineering News, January 3, 1901 (see illustration). (10)

Whittemore's headhouse design includes a bulkhead wall about 900 feet long built along the river's edge. This wall and the footings of the three piers were designed to provide bearing capacity in soft mud and to resist wave stresses and impacts from docking ships.

The waterfront was dredged to clean sand and rock bottom. Cobblestones were piled underwater for the 900-foot length and a 60-foot width. Piles were driven into the cobblestone layer, three feet apart and at a height of 24 feet below mean low water. Gravel fill was placed in the spaces between the piles.

Resting on top of this pile foundation are timber caissons filled with Portland cement and broken stone temper. The timber caisson reaches the level of mean low water. From this point, the bulkhead wall is visible above water, and it becomes the headhouse footing. A wide concrete and broken stone wall rests on the caissons. This wall is faced with granite ashlar masonry, which gives the wall a finished appearance.

Superstructure, Exterior

According to Whittemore's original plans, the headhouse's dimensions were to be 850 feet long (north-south) by 130 feet wide (east-west). As built, the terminal is 893 feet long by 128 feet deep. This is the largest structure built along the Hoboken waterfront in the city's history. Even so, the building's scale conforms to the low, three to four-story buildings of early 20th century Hoboken. The visual impact of building's massing is its great length--nearly two city blocks long.

The exterior walls are red brick laid in American common bond, with header rows every seventh course. The walls are two stories high (west wall height: approximately 45 feet), with three three-story pavilions in the west(main) facade (west wall height: approximately 65 feet). These

pavilion third stories are less than half the depth (east-west) of the headhouse. Two pavilions correspond to the points on the east side where two piers joined the headhouse. Whittemore's original plans had the three pavilions and piers in alignment. As constructed, however, Pier 1 was not aligned with the north pavilion. It was placed a few bays north of the pavilion.

Under North German Lloyd ownership, these pavilions were labeled as the entrances to Piers 1, 2, and 3, from north to south, respectively. Cargo was handled in the first floor, passengers and baggage received in the second (along with waiting rooms and company offices), and a roof garden and visiting and viewing area was provided for passengers and visitors in the third floor of the pavilions.

The west facade fenestration appears to be arranged symmetrically because the three pavilions give definition to the building's north, center, and south. A few of the first-story bays at the south end of the building were altered in the mid-1950's, with smaller doors and brick wall fill. As a few of the first-story bays have been altered and they are in the shadow of a metal canopy for most of the building's length, the bay arrangement is not as visible as it is in the upper stories. The second-story bay arrangement from north to south is 2-5-13-6-11-6-7 (50 bays, and the underlined numbers refer to bays in the pavilions). The pavilions have the same number of bays in the second and third stories. The first two north bays are set back from the west facade.

In the first story, most of the bays contain replacement metal roll-up cargo doors. There are two cargo openings and metal roll-up doors in the north end wall. Neither contemporary descriptions nor photographs give evidence of what door type originally existed, but they were probably metal for fireproofing.

In the second story, each bay contains a large window with a segmental arch top and granite sill. The arch top is outlined by four rows of brick headers. The windows have replacement clear glass in metal casements. The 1906 photograph of the Headhouse, "View of Dock Fronts," shows multi-paned windows, probably set in metal mullions (see illustration).(11) According to the description in The Engineering Record, all headhouse windows were to be glazed with wire-glass for fire protection.(12) In the three pavilions, the central windows repeat the second-story segmental windows. These were originally doors to the passenger waiting areas, but were changed to windows in the mid-1950's renovations. At that time, the south pavilion's central windows were changed to square openings with cargo doors. The central windows in the second and third stories are framed by narrow windows, paired in each bay, with segmental arch tops and granite sills. The arch tops are outlined by three rows of brick headers.

The west loading dock runs along the base of the first story for nearly three-quarters of the facade, or 593 feet, from Section C's pavilion to Section B's pavilion. This is a cement dock with wood framing, and is probably replacement, in whole or in part. It is about 18-1/2 feet deep. A horizontal metal canopy replaced the steel awning, that was twenty feet deep and hung at an angle over the loading dock. The dates of the replacement dock and canopy are not known, but they appear to be from the mid-20th century.

Between each bay of the west facade, the brick wall is accented by flat brick pilasters. The first-story pilasters spring from granite ashlar masonry bases behind the loading dock floor and between each cargo door. The stone blocks have rock-faced finish with smooth margins. They are laid in alternating header-stretcher pattern, in the same way that the caisson wall is finished on the east side foundation. The brick pilasters carry a vertical emphasis through to the second story and the pavilions' third stories. The pilasters end in paneled capitals in the parapet wall.

The brick bay walls between the pilasters step out in four rows of corbeled brick over the second story and third-story pavilion windows. There is another row of corbeled brick that runs horizontally under the second and third-story parapets. This row is also under the north and south parapet walls of each pavilion. The parapet bases have granite blocks laid flat in two rows. In the pavilions, distinguishing the second from the third stories, is a thin band of flat granite. Whittemore's plans in The Engineering Record show an iron railing with wire netting along the length of the brick and stone parapet that actually was built.

The "North German Lloyd New Terminal" and the "View of Dock Fronts" illustrations show brick roof parapets stepped in five parts over the west facade of each pavilion. The highest step, which bore the shipping line's identification, was over the central bay in the north pavilion and over the central two bays in the middle and south pavilions.

A Port Authority file photograph taken in February 1955 (negative no. TP-596) shows the stepped parapets over all three pavilions (see illustration). These were removed and replaced during the mid-1950's renovations. A Port Authority file photograph from summer or fall 1956 (negative no. TP-820) shows the north and middle pavilions with flat west parapets -- brick walls outlined above and below with granite bands (see illustration). A third Port Authority photograph shows the south pavilion flat parapet in place in October 1956 (negative no. TP-973). The new west parapets were built to match the height of north and south side wall parapets over the pavilions. The new parapets also match the design and height of the second-story west parapets. The replacement parapets were the most sympathetically designed features of the 1950's headhouse renovations.

Roof-top features within the parapet walls include: the third stories of the three pavilions, with three square glass and steel monitors immediately at their east; three rectangular glass and steel monitors between the square monitors of pavilions 1 and 2, 2 and 3, and south of 3; brick-walled housing for the pavilion elevator shafts project above the south end of each pavilion.

The building's only extant chimney stands south and east of the southernmost rectangular monitor. It originally vented a heating unit in the first floor south end. The chimney is round, with brick headers and an ornamental brick arrangement below the cap. The chimney has square, corbeled brick base, which touches the south parapet wall.

A 1930's aerial photograph of headhouse Section B-C shows a flat-roofed third story built between the pavilions of Piers 1, 2, and 3.(13) These additions were built sometime between 1917 and 1934. They appear to be of brick and wood construction. A Port Authority aerial photograph taken in January 1954 (negative no. TP-355) shows the third story formed two "rings" around two rectangular monitors and the square monitor of Pier 2 (see illustration). It is likely that the third-story additions did not alter the second-story roof parapets, but rather covered or incorporated them. The third story was removed by the Port Authority around 1955-1956. The current roof surface is replacement, probably less than 20 years old. Much of the roof flashing is copper that has aged to a green surface color.

Two contemporary images show three stair-and-platform constructions that were attached to the pavilions' west walls: 1902, "North German Lloyd Terminal," and 1906, "View of Dock Fronts," (see illustrations).(14) Each landing was about 50 feet deep (east and west) by about 120 feet long. Each had north and south end stairs from the ground level to the second story. These stairs led to a large platform at the height of the metal canopy over the loading dock. The platform gave access to the second story, where passengers and baggage were received. Set back on this platform was another set of stairs leading to a smaller platform. This was the entrance to the third-story visiting and viewing area.

The north exterior platform was removed when the Hoboken Manufacturers Railroad tracks were laid in the upland plaza, around the time of World War I. The middle exterior platform was removed during the mid-1950's renovations. The second story of the south platform (old Pier 3, now Pier B) was retained during the renovations. The Port Authority's mid-1950's renovations included rehabilitating the second stories of the south and the south pier to accommodate both passengers and cargo, and building a two-lane vehicle ramp from the south pavilion landing. This was done in 1955-1956. The old second-story landing, which has a welded steel construction, was resurfaced and fitted with a new rail. The cargo ramp has welded steel supports and a two-lane macadam deck. It curves down from the landing toward the south parking lot, projecting westward from the wall about 120 feet and extending for approximately 290 feet. The ramp is unsympathetic to the original design and detracts from the rhythm of the west facade.

The east (river) wall ornamentation is similar to that of the west facade. The east side fenestration openings have dimensions similar to the west facade openings. The east bay arrangement from north to south is 4-14-4-13-5-8 (48 bays, and the underlined numbers refer to the joining points of Piers 1 and 2 and the joint of old Pier 3, now Pier B).

The headhouse east foundation is finished with a granite water table. A shallow walk (less than four feet deep) finishes the top of the caisson. The rock-faced, granite ashlar blocks that sheath the caisson foundation are battered (inclined), and are laid in alternating header-stretcher pattern.

The first-story east bays differ from the west. There was originally a cargo door opening every other bay, except where the piers joined the headhouse, and these areas each had four cargo doors. Between each of the cargo bays remains a pair of windows with arched tops, outlined with header bricks in the arches and granite sills.

Pier 2's east bays were sealed after the pier was removed in 1956. Pier C was built to replace Pier 2 in that year. It is nearly four times the width of the earlier pier and it spans the width of about 20 of the headhouse's east wall bays. All east cargo openings have replacement metal roll-up doors.

In the second story, there is one large window in every bay. Each window has an arched top outlined with four rows of header bricks and granite sill.

The east wall cornice and parapet are finished with the same brick and granite details as they are in the west wall.

Superstructure, Interior

The terminal's steel frame is composed of built-up columns, plate girders, and rolled I-beams. The steel framework is independent of the brick walls. The frame is in three spans from east to west, each nearly 43 feet wide. The first-floor height is 17'-6" and the second-floor height beneath the monitor is 27'-0". Between the I-beam frames under both floor surfaces and under the roof surface are single ring, shallow brick arches. Originally the floor surfaces were paved with brick on the ground floor and roof, and paved with asphalt on the second floor.

The pavilions originally contained five interior stairs and elevators to the second and third floors. The stairwells along the south wall of the north pavilion and the stairs along the north wall of the middle pavilion were removed during the mid-1950's renovations. Three stairs remain: one set (altered, mid-1950's) along the south wall of the middle pavilion, and two sets along the north and south walls of the south (Pier B) pavilion (north set altered, mid-1950's, and south set unaltered).

The three remaining stairs have dog leg runs, with landings on the second and third floor levels and landings that lead to the elevators, opposite the windows, between the runs on the first and second stories.

The two altered sets and their respective halls were completely remodeled in the 1950's, with new railings, tread and floor surfaces and dropped ceilings.

The unaltered set in the south pavilion dates to the 1903 construction. It consists of welded cast iron landings, treads, risers, string courses, balusters, newels, and handrails. The newels are square in plan, with shallow vertical panels on each side. The stairwell walls are plastered.

The three remaining sets of elevators are also in the middle and south pavilions. Two sets were altered in the mid-1950's renovations. The doors and mechanisms were replaced. The unaltered set has three-part metal doors in the first floor, and two-part metal doors in the second floor. Part of the elevator mechanism -- a cast-iron wheel for a pulley -- is visible in the third floor of this unaltered stairwell. The ceiling over this third floor was not altered: It has corrugated metal panels shaped in shallow arches that span from north to south. The metal is surfaced with cement.

Whittemore's design boasted a number of fireproof features. Interior columns were protected by concrete casings. Transverse fire walls crossed the width of the building at five points, dividing the first-floor storage space and sheltering the second-floor waiting rooms and offices. The second-floor fire walls originally had double doors of wood covered with sheet iron. Fireproof walls in the three pavilions enclosed the welded iron interior stairways and the elevator shafts. All windows were glazed with wire-glass. The undersides of the second floor and the second-floor roof were originally fitted with a dry pipe system of automatic sprinklers. An automatic alarm cable system was also wired through the building.

The first and second floor plans each have six main spaces. These are between the five east-west fire walls of the 1903 design.

Because most of the first floor was used for cargo moving and storage throughout the building's history, the layout remains suitable and few changes have been made. During the 1950's renovations, some small spaces were partitioned by cement block walls.

In the original 1903 plan, there was a rectangular cargo loading space between each pavilion and its corresponding pier. Cargo was moved through the west cargo doors and the loading space, and out to the first floor of the pier. After the 1950's renovations, which removed old Piers 1 and 2, only the north (Pier C) and south (Pier B) loading areas remained as direct flow-through spaces to the piers.

Cargo was also moved into the headhouse first floor through the west cargo doors in the wall between the north and middle, and the middle and south pavilions, where there are large, rectangular spaces. The space south of the south pavilion is smaller than the other two. Its south wall joins the north wall of Section A.

The second-floor spaces correspond to those of the first floor. There are three rectangular areas east of (behind) each pavilion. These spaces each have a square or nearly-square roof monitor. These were the passenger and baggage entrances in the original design. They were divided into waiting rooms at the east and offices at the west. After registering here, passengers moved into the waiting rooms or upstairs to the visiting and viewing areas.

Renovations removed traces of the waiting rooms and offices in these three second-floor spaces. In the southern one (behind Pier B), there is one remnant -- a large booth that appears to date from the early 20th century. The booth is about 10 to 12 feet high, less than 20 feet long, and about 10 to 12 feet deep. It has a wood frame that is surfaced with corrugated metal sheets. It has a wood base. Six windows (1/1 sash) pierce each long side, and two windows frame metal doors in each short side. The booth has a flat roof and a shaped metal cornice. The interior floor is wood. The desks on either long side may be replacements. There are two fluorescent lights with Art Deco style metal ends. These may date from the 1930's or 1940's.

The booth's original location is unknown, although its size compared with openings in the north and south walls suggest it stood in this south waiting room space. It stands against a wall, but its wall windows indicate it once stood where it was accessible from four sides.

The large, rectangular halls between the north, middle, and south office and waiting room spaces originally served as baggage inspection areas. These two halls are long and as deep as the headhouse. Ample daylight enters each of the halls through the east and west windows and a large roof monitor. The middle hall has a large security storage area along its east side. Floor-to-monitor wood slats and wire stand between the welded steel supports and enclose nearly a third of the room's depth and all but one bay of its length.

The space south of the south pavilion was originally a baggage inspection area. It was altered in the mid-1950's as a meeting hall. The ceiling was dropped and the floor and walls resurfaced.

There are two sets of large iron doors in each wall of the north rectangular space. Each door is nearly as tall as the ceiling height (about 18 feet). The doors have horizontal welded panels on the south sides and vertical welded panels on the north. The doors slide on iron tracks and the openings have welded iron frames.

Some single-width openings in the walls that separate the second-floor spaces have solid metal doors that are from the early 20th century. Others were altered later or during the 1950's. Single-width doors have glass upper panels in metal frames. Multiple width entrances have glass panels in metal frames.

The utility systems were replaced or rehabilitated in the 1950's and later. Fire control/alarm features are replacement or new. Interior features such as entry and cargo doors, freight elevators, piping, and boilers have been replaced at various times, most recently under the Port Authority's lease.

Water leaks and a large pigeon population contribute to the ongoing deterioration of interior features, especially to the floor surfaces and the structural steel members. Most of the steel has been painted in recent years and many surfaces are peeling.

Headhouse Section B-C: The Three Original Piers

The design of the three North German Lloyd piers is of interest, and reflects concern for bearing capacity, wave and impact resistance, fireproofing and fire control. Because Piers 1 and 2 no longer exist and Pier 3 (now Pier B) was seriously damaged by fire in 1980, original description details are only available in The Engineering Record and Engineering News articles noted above.

The piers each had slightly different lengths and widths: Pier 1, 905.46 feet long, 80 feet wide; Pier 2, 889 feet long, 80 feet wide; Pier 3, 869.27 feet long, 90 feet wide. The distance between Piers 1 and 2 was 198.36 feet; between Piers 2 and 3, 250 feet.

Substructure

The pile substructures of the three piers were complex and substantial. Typical substructure is detailed in The Engineering Record and Engineering News articles. Some parts were braced, and parts close to the deck were treated with creosote. The pier decks were wood, and gravel concrete covered the outer edges and east ends of the piers.

Superstructure

Each pier had a two-story steel frame shed. The shed occupied all of the pier deck but four feet on either side and within fifty feet of the pier's east end. The first floor was for cargo and supply loading and unloading. Passengers used the second floor to board and leave the ships.

In a typical transverse section of one of these piers (see illustration from The Engineering Record), side wall steel columns supported a plate roof girder. The girder had suspenders that supported the second-floor girders. The plate roof girder supported a monitor with steel frame and wire-glass panes. There were three monitors on each pier shed roof.

Most of the walls between the steel columns were large doors, each in two parts. The lower section slid in vertical grooves, and the upper section revolved with tackles around horizontal axes.

The undersides of the pier sheds' floors and roofs were fireproofed with corrugated iron arches and cinder concrete. Only the monitor ceilings were of wood. Further fire protection in the piers was provided by three fire-walls that divided each pier into three nearly equal parts. These walls were made of several thicknesses of wood board covered with roofing terne plates. There were two large openings on each floor through the fire-walls. These were closed with tin-covered wood doors that moved on tracks. The breaks between the three monitors on each pier shed roof corresponded to these fire-walls.

The piers were fitted with automatic sprinklers of a dry pipe system. The pipes were placed on the undersides of the roof and floors. A six-inch water pipe with hose attachments was run along each side of each pier. The piers had automatic cable system fire alarms.

Each pier had 61-foot derrick masts along the north and south sides. The height of these masts reached above the second-story roof. The masts were fitted with steel span wires for handling freight. There were cast-iron mooring posts at ninety-foot intervals on both sides of each pier.

Piers 1 and 2 were demolished in 1955 and replaced by Pier C in 1956. Pier C was originally labeled Pier A in the 1950's and vice versa. By the 1970's, as the activities and occupation began to focus on the south headhouse area, the labels were switched--C is the north pier and A is the south pier. Both piers are closed now. Pier A's superstructure has been dismantled.

Pier 3 (now Pier B) was modernized by the Port Authority in 1955-56. The pier was altered to handle both passengers and cargo. First-story cargo doors along the north and south sides were replaced by metal roll-up doors. Repairs were made to the substructure, the deck sides were widened to 12 feet, and the door bays along the river end were enlarged. New lighting (fluorescent) and sprinkler systems were also installed.

The Hamburg-American Pier 1 Terminal, now Port Authority Headhouse Section A

The construction history of the Hamburg-American terminal--the red and yellow brick south end of the Port Authority Piers Headhouse--is vague and poorly documented. Original plans, elevations, construction details, and dimensions are not available. Hoboken city building records before 1950 were destroyed in a fire. The construction history that follows is conjecture based on information from early 20th century maps and photographs.

The historical background above mentions a large, empty plaza that stood between the North German Lloyd terminal and the Hoboken ferry slips in the late 19th century. This is illustrated in the 1874 print "Hoboken." In 1882, the Hamburg-American Company bought this land from the Hoboken Land and Improvement Company. The steamship line completed construction on a terminal and two piers in 1883. The piers were perpendicular to the terminal's north and south ends.

Two additional pieces were added to the Hamburg-American terminal, between it and the North German Lloyd terminal: (1) a north extension to the 1883 terminal, parallel with the river, and (2) the brick terminal (Section A) attached to Hamburg-American's Pier 1.

The 1883 terminal's north extension was built sometime between 1883 and 1899. It appears on an 1899 print, "Landungsplatz der Hamburg-Amerika Linie in Hoboken." (15) This print (see illustration) illustrates Pier 1 and its terminal. The 1883 terminal's north extension is shown attached to the south wall of Pier 1.

The 1899 print shows Pier 1 as a long, narrow building, two stories high, which has the appearance of an overextended pier. It seems to have been as wide as the other Hamburg-American piers (Nos. 2 and 3), about 80 to 100 feet. The River Street entrance facade was flush with the street's sidewalk. It resembled the entrances on the 1883 terminal, reflecting the German Renaissance style, with a three-part facade and wide central entrance. In the south wall facing the plaza, the building had cargo doors in the first story and small rectangular (horizontal) windows in the second story. There was a full length roof monitor that extended from the River Street end to the east pier end. It is not possible to determine the exact plan of the building and the shape of the monitor roofs, although the westernmost end of the building appears to have had a gable roof.

The next available illustration of the terminal is in Hughes and Bailey's 1904 "City of Hoboken, New Jersey." (16) This print (see illustration) shows the site from the east (river) view. Pier 1 appears to be about the same length as Piers 2 and 3, and its east end wall is designed similarly. The Pier 1 terminal has been enlarged by a rectangular building that intersects the terminal at its west end. This section is two stories high, with gabled roof and a full-length, gabled roof monitor. The pier and

terminal monitors intersect in the shape of a cross. The massing, scale, roofline, and east wall of this addition resemble those features of Section A, close enough to support the idea that the 1904 print actually illustrates Section A. The 1904 print also shows that the west end of the building retained its 1899 appearance: The building extended into the plaza, with the three-part facade fronting River Street. The print's detailing does not distinguish the red and yellow brick in the east wall.

The best construction date that can be given for the rectangular part of the Pier 1 terminal is sometime between 1899 and 1904. The 1899 print may not provide a reliable illustration of Pier 1, but because the other buildings are shown with fairly good detail, the illustration is probably true. The 1904 print also appears reliable.

The 1904 print apparently shows Section A in a transitional construction stage. The west entrance must have been remodeled between 1904 and 1906. The 1906 souvenir booklet photograph "View of Dock Fronts" shows most of the polychrome west facade as it is now. (17) The earlier west entrance was removed and its length was shortened. The new west entrance was in a stepped, projecting pavilion, kept on an axis with Pier 1, but closer to the terminal and pier.

The red and yellow brick terminal gave the Hamburg-American property a new image. The design and ornamentation was different from the waterfront buildings nearby. The architectural style of the terminal (excluding unsympathetic 1950's exterior alterations) is late Victorian utilitarian, with Gothic Revival and Renaissance Revival influence in the ornamentation.

The 1906 photograph shows a number of details that do not remain. A fence and gate fronted both River and Newark Streets, and a vehicle and passenger plaza lay between the fence and the terminal. The River Street gateposts are large piers that appear to be built of red brick with yellow panels, three panels high. A smaller pier of similar design flanks each of the large piers. Each has a pyramidal cap and a ball finial. The span between the large posts appears to be metal, with the identification "Hamburg-American" on the cross-beam and an ornamental arch above. The ornamental metal post fence was kept during the 1950's renovations. The Hamburg-American gateposts were replaced by square, brick piers, lower in height than the originals.

Ball finials also decorated the terminal, above the paneled "capitals" in the cornice (see description of cornice below). Metal lion's head drainspouts were attached to the yellow brick piers just above the first-story ceiling height. These ornamental details are also gone.

The projecting entrance pavilion was six bays wide and two stories high. The first story under the pavilion was open as a porte-cochere for vehicles and for cargo loading. Six yellow brick piers outlined the bays and encased the second-story supports. The two central bays projected further for two covered passenger staircases. These rose from the plaza level at either side of the central bay. The bottom of this bay had a horizontal band marked "Pier 1." Angled canopies, probably of metal, shielded the porte-cochere along the west walls.

The 1906 Plat Book of Hudson County labels this Hamburg-American building "fireproof." (18) This suggests that the building design had fire control features, although the particulars are unavailable.

Piers 2 and 3 and the 1883 terminal and its north extension were destroyed by fire in 1921. Pier 4 was destroyed by fire in 1944. The Pier 1 terminal, now Section A, is all that remains of the Hamburg-American buildings.

Pier 1's terminal is more fussily detailed than the North German Lloyd terminal. The fenestration is closer and the openings are smaller-scaled. The brickwork detailing is late Victorian in style and somewhat conservative, giving the building a castle or fort-like appearance. The gable roof and monitor spanning the full ridge suggest a late 19th or very early 20th century construction date. The north and south roof ends originally were finished with brick walls and stone-capped stepped gables.

The contrasting appearance of the flat-roofed Lloyd Line terminal against the gable roof of the Pier 1 terminal distinguishes the two and adds interest. The companies' property lines fell between these two walls.

Pier 1 terminal's two floors probably had the same functions as those of the North German Lloyd's terminal. The first story seems to have been used for cargo and storage. The 1906 souvenir photograph "View of Dock Fronts" shows the stairs flanking the pavilion entrance, and supports the idea that the second story was used for moving passengers on and off the ships. (19) (The North German Lloyd terminal also had passenger stairs at the three entrance pavilions).

The Pier 1 terminal (Section A) is now 266 feet long, from the south (altered) end to the north wall against the former Lloyd Line terminal (Section B-C). At its widest point (what remains of the projecting entrance pavilion), the building is 207 feet deep. The east and west walls are approximately 44 feet high, and the gable roof monitor is approximately 60 feet high.

The Pier 1 terminal exterior walls have red glazed brick laid in American common bond, with headers every seventh course. In the west (main) and east walls, the building's fenestration is outlined by and ornamented with yellow glazed brick pilasters, also laid in American bond. Exterior wall alterations in the west, south and east walls made in the 1950's have smooth-surfaced brick, in a different shade of red, also laid in American bond.

The building has a structural steel frame (the piers and arches are exposed in the first floor interior) and brick interior walls. The substructure-foundation is not known. Weaknesses developing in the landfill or the substructure have caused uneven settling and consequent structural damage. Among the current problems is a bowing cornice over the west second story.

The original west facade fenestration arrangement in the second story read 8-6-12 bays, from north to south. In the 1950's, after the central projecting pavilion and its yellow brick piers were removed and the building's length was shortened, the bay arrangement became 8-5-5. The central pavilion opening was sealed with brick and a band of windows. Seven bays were removed at the south from the west facade, and six bays were removed from the east side.

The first and second stories of each west facade bay are outlined by wide, yellow brick pilasters. Their two-story height give the impression of a colossal order. These pilasters end in the cornice with paneled red and yellow brick "capitals" in a paneled red and yellow brick frieze. This frieze is finished at the top with stone capping. It runs across the west facade above the second-story windows. Above and below the frieze are bands of corbeled yellow bricks in mock machicolation, giving the cornice the appearance of a refined battlement. Between the first and second story windows, a thin band of yellow brick outlines the red brick wall between the top of the first story and the second-story window sills.

The window openings are outlined with yellow brick, arched in rows over the top and staggered like quoins along the sides. Metal sash originally filled the segmental arch openings. Replacement casement sash and panels from 1950's alterations fill the openings.

The yellow brick detailing in the east (river) wall is simple: Wide, colossal pilasters give vertical emphasis between the bays. The pilasters are ornamented at the first-story ceiling height with corbeled bricks in imitation of capitals. A red brick diamond is set into each corbeled "capital." The pilasters end with corbeled brick and stone-capped capitals that project slightly above a shallow second-story parapet. There are no yellow brick pilasters in the east wall center section (three bays wide), where Pier 4 was originally attached to the building. This opening was sealed with red brick and flat red brick pilasters marking each bay, work probably done soon after Pier 4 was destroyed by fire in 1944.

First-story windows in Section A's east wall are nearly as high as the story. They have metal casements, probably replaced in the 1950's. The second-story windows were altered in the mid-1950's. A Port Authority photograph (negative no. TP-277) taken in September 1953 shows single squarish windows with metal casements set between the yellow brick pilasters, high in the wall under the roof eaves. A few feet beneath each of these was a square metal door, which, in this photograph, appears to move vertically on tracks. The mid-1950's alterations replaced these windows and sliding doors with single windows set in (new) glazed red brick, between the yellow pilasters. These windows have horizontal metal casements. Section A's east apron has a wooden pier substructure with cement paving. The apron is deeper at the south end, slightly narrower at the former Pier 4 joining, and very narrow at the north, where it meets Section B-C's ashlar caisson wall.

The north end wall is finished with a stepped gable. The topmost gable member is the monitor in profile. A photograph made in the mid-1950's (Port Authority negative no. TP-277) shows that the south end wall was finished similarly (see illustration). When the building was shortened, the south wall was removed and replaced. The monitor openings originally were glazed. The monitors are sealed with corrugated metal sheets.

There is an outline of a gable-roofed, one story building on the north brick wall of Section A, where Section A projects west of Section B-C. This was a building that stood in front of the south few bays of Section B-C. It was built sometime between 1917, when the United States took over the site, and 1927. The 1927 plan U.S. Shipping Board Piers at Hoboken, N.J. shows that this small addition contained a transformer, and that the walls were made of reinforced concrete. The addition also appears on Plate 3 of the 1933 Plat Book of Hudson County (Volume 2). A photograph taken by the Port Authority in summer or fall of 1956 shows a light-colored, one story building with gable roof. The building was removed shortly after this photograph was taken, when the cargo ramp was built in the upland area.

Original floorplans are not available. Throughout the building's history, most of the first floor was used for cargo and baggage, storage, and machine shops. Small subdivisions and part of the east wall interior are of cinder block. The first-story interior ceiling has shallow brick arches between the steel members. Some of these retain textured terracotta tile surfacing.

The second floor retains nothing of what could have been its early plan. No early 20th century features remain. Second-floor alterations made for office spaces date from the 1950's to the early 1980's. The Port Authority recorded one complete rehabilitation in 1955, but the details are not available.

It is possible that Walter F. Whittemore contributed to or made the design of the late 19th and early 20th century Hamburg-American buildings, specifically the 1883 north terminal extension and the Pier 1 terminal. Whittemore did not receive his engineering degree until 1883, so it is unlikely that he was involved in the 1883 terminal design. His memoirs credit him with designing most of the Hoboken waterfront shipping buildings. As an engineering consultant, he was associated with the Hoboken Land and Improvement Company, which was a significant force in directing the waterfront development.

The North German Lloyd and Hamburg-American Terminals in the Early 20th Century

Both these steamship companies dominated Hoboken's south waterfront, with their piers (six altogether) and a long stretch of terminals. Hoboken continued as a port for first-class immigration entry. (Nearby Ellis Island in Upper New York Bay opened its immigration processing for steerage passengers in 1892). The lines contributed to Hoboken and to local New Jersey economy by providing jobs, purchasing supplies and fuel, and encouraging trade for the city's hotel, restaurant, bar, livery, and associated businesses. The railroad terminus and ferry service also contributed to Hoboken's bustling early 20th century waterfront.

The two lines competed with each other for business and competed with America's efforts to strengthen its own shipping lines. The Hamburg-American line was said to withhold advertisements from American newspapers that supported a strong national merchant marine. The Hamburg-American was reported to be coercing Russian immigrants to travel the line. In 1913, the Sherman Anti-Trust Act was brought against the Hamburg-American Company and other North Atlantic steamship companies for monopolizing transatlantic passenger traffic. (20)

New York City's Mayor William J. Gaynor was shot on the Hoboken waterfront on August 9, 1910. Gaynor was boarding a ship berthed at North German Lloyd's Pier 2. He was speaking to an official when James J. Gallagher pushed his way through and shot Gaynor in the neck. Gallagher was a docks employee who had been dismissed and became convinced that the mayor was responsible. Gaynor recovered and completed his term as mayor.

President Woodrow Wilson began his administration in 1913 with the belief that government could act to protect and strengthen the nation's free enterprise. This was a change from previous policies. Wilson especially wanted to strengthen the American merchant marine, which had been in a decline since the Civil War. Before World War I, nearly 92% of the country's foreign trade was carried by ships from England, Germany, and other countries. When the war disrupted the transatlantic passenger service from England and Germany, the United States realized the significance of having its own shipping industry.

Congress passed the Shipping Act of 1916, establishing the U.S. Shipping Board. This was the first regulatory agency overseeing maritime issues. The Act forbade government shipping operations except during national emergencies. It created the U.S. Shipping Board Emergency Fleet Corporation (EFC), which could purchase, build, and operate ships for the government in such emergencies.

When the United States declared war on April 6, 1917, there was no operable merchant marine. The government needed an organization to transport troops, food, and equipment to Europe.

On April 15, 1917 President Woodrow Wilson approved the seizure of German-owned waterfront properties. The Battalion of the 22nd Infantry took over the Hoboken piers on April 18. Altogether 65 German and 14 Austrian ships were seized in American ports for violating neutrality laws. These provided over a half-million tons of shipping. The ships and properties were not considered confiscated but rather "frozen" for return or other use after the war.

In 1917, the Urgent Deficiencies Act of June 13 and the Emergency Shipping Act of June 15 authorized the president to define the powers of the U.S. Shipping Board and the EFC. The Shipping Board acquired or built a number of shipyards on the Atlantic Coast.

Upon the decision of the United States Department of War, Hoboken was chosen as the major U.S. port of troop embarkation. Thousands of soldiers and sailors filled the city. The War Camp Community Service published a pamphlet for servicemen who stayed in Hoboken until their transports left. "On Liberty in Hoboken, New Jersey" provided a city map that labeled the former Hamburg-American and North German Lloyd terminals "U.S. Embarkation Piers." (21) At this time, the six piers were numbered one through six, north to south respectively. More troops and supplies of the American Expeditionary Forces left the country from the Hoboken piers than from any other eastern U.S. port. During and after the war, the bodies of deceased servicemen were returned to the United States through Hoboken.

The boom that took over Hoboken's economy during the war years was based on the rail and shipping facilities. Once the United States entered the war in 1917, the former shipping piers became the center of wartime activity and a major shipping port for food and military supplies. Ships of all sizes were docked at the piers that once belonged to the German steamship companies. The Hoboken Manufacturers Railroad tracks were laid through the shipping piers' River Street plaza, connecting the piers with industries at the north.

The emergency building program produced a substantial fleet. The U.S. Shipping Board put two-thirds of the force on the war routes for the American Expeditionary Forces (AEF). The remaining third was used to import goods needed by the nation and the manufacturers of AEF supplies. Shipbuilding was a major national industry when the war ended in November 1918.

Woodrow Wilson departed for the signing of the Paris Peace Treaty on December 4, 1918. Wilson's ship left from Pier 4 in Hoboken. Once the war ended in late 1918, many servicemen returned to the United States through Hoboken. After the war, the government chose to continue expanding maritime strength. But within a short time, the United States found itself with the world's largest shipping vessel surplus. There was a worldwide shipping depression between 1920 and 1922.

The wartime activity subsided in Hoboken, and it left different marks on the city. Because the war jobs ended, unemployment rose. The city's population declined as people left Hoboken for the suburbs.

Congress elected to return most of the seized properties when the war ended. However, the U.S. Shipping Board retained the former German piers in Hoboken. The Board maintained a limited passenger and cargo service. In reestablishing business in the New York area, the German steamship companies had to relocate in New York City.

The government probably did not return the Hoboken piers to private industry because the site's location and size were valuable not only to national defense but also to the expansion and strength of the U.S. Merchant Marine. The Merchant Marine Act of 1920 was the first written public policy concerning the merchant fleet:

It is necessary for the national defense and for the proper growth of its foreign and domestic commerce that the United States shall have a merchant marine of the best equipped and most suitable vessels sufficient to carry the greater portion of its commerce and serve as a naval or military auxiliary in time of war or national emergency, ultimately to be owned and operated privately by citizens of the United States, and it is hereby declared to be the policy of the United States to do whatever may be necessary to develop and encourage the maintenance of such a merchant marine, and in so far as may not be inconsistent with the express provisions of this act, the United States Shipping Board shall, in the disposition of vessels and shipping property as hereinafter provided, in the making of rules and regulations, and in the administration of the shipping laws keep always in view this purpose and object as the primary end to be attained.

On August 25, 1921 a second major fire destroyed parts of the Hoboken piers. The Army Board of Inquiry determined that faulty wiring set inflammable cargo and waste on fire. Pier 5 (formerly Hamburg-American Pier 2) was completely destroyed, and Pier 6 (formerly Pier 3) was partially lost. Neither was rebuilt. The former 1883 Hamburg-American terminal between Piers 5 and 6 was destroyed. Pier 4 remained as the last Hamburg-American pier.

During the fire, wireless was used for the first time in an emergency in the New York metropolitan area. When the Hoboken Fire Department lost water pressure in the city's hydrant system, the department telephoned the New York City wireless station. The station communicated with the New York City police boats in the Hudson River. The police directed the harbor boat crews to protect the railroad station and ferry slips at the southern Hoboken waterfront.

In the mid-1920's, a number of American steamship lines built luxury ships for their transatlantic passenger routes. These lines, together with government actions and policies such as the Merchant Marine Act of 1928 (also known as the Jones-White Act, which authorized payments for mail transport and loans for shipbuilding), helped to bring the American shipping industry out of its depression, and maintained activity and jobs on the Hoboken piers. The U.S. Shipping Board leased at least one of the four remaining Hoboken piers to government-subsidized shipping companies.

Between the 1920's and the 1940's, the City of Hoboken made several requests to the U.S. government to return the terminals and piers to private use and place the property back on the city tax rolls. The City's position was that the war emergency was over and the City was losing millions in taxes on the large, exempt pier property. Municipal officials sought compensation for the lost revenue and asked the government not to compete with private industry in the post-war economy. The government did not respond to Hoboken's requests.

In 1933, under Roosevelt's administration, the U.S. Shipping Board's power was reduced when it was made a bureau in the U.S. Department of Commerce. The board's successor agencies remain in this department.

Plates 1 and 3 of the 1933 Plat Book of Hudson County (volume 2) identify the four Hoboken piers and "bulkhead buildings" as belonging to the U.S. Shipping Board. The former North German Lloyd pier 1 is labeled "American-France Lines" and "Cosmopolitan Shipping Co., Inc." (These companies leased the pier). For identification, the pier properties are marked "North German Lloyd Dock Co." and "Hamburg American Line Terminal and Navigation Co.," respectively, in parentheses. Buildings identified as the "Agricultural Economics Bureau" and the "Merchant Marine YMCA" are shown in the upland area along the east side of River Street (see illustration).

The Merchant Marine Act of 1936 maintained the goals of the 1928 Act and encouraged the shipping industry by providing subsidies for ship construction. The U.S. Maritime Commission was created to succeed the U.S. Shipping Board. The new agency was empowered to build ships for the government in time of national defense. The Commission began a program to revitalize the American merchant fleet. It pressured the subsidized companies to commit their profits to new ship construction.

1940 to the Present

By 1940, government defense efforts were beginning. A tremendous building program provided many new merchant ships before the United States entered the war. On February 7, 1942, President Roosevelt signed an executive order establishing the War Shipping Administration. This agency was responsible for organizing and maintaining the merchant fleet, which was needed for supply transport.

Because World War II was fought in two theaters -- the Atlantic and the Pacific -- Hoboken was not the point of singular focus that it was during World War I. The U.S. Army leased the pier properties from the Maritime Commission, and the waterfront was again a center for troop embarkation. The merchant fleet delivered army supplies from Hoboken to Europe. The Hoboken shipyards north of the Army piers (alongside and north of the Castle Point promontory) were continually busy with construction and repairs.

On August 12, 1944 a third fire occurred on the Hoboken piers. Flammable liquid stored on Pier 4 was accidentally ignited by truck exhaust sparks, followed by a series of explosions. Pier 4 was destroyed and was not replaced. There was damage to Pier 3 at its terminal end, and damage to what was left of Pier 6 after the 1921 fire.

The War Shipping Board was dismantled in 1946. The Maritime Commission handled merchant marine issues until it was replaced in 1950 by the Federal Maritime Board, which regulated the industry, and by the Maritime Administration, responsible for the industry under the Department of Commerce.

In 1945 the Hoboken City Council asked the Port of New York Authority to study and assess the waterfront property. The Port Authority presented a study to the city in 1947. It proposed that the U.S. Maritime Commission lease the terminal and piers to Hoboken, which in turn would lease the property to the Port Authority. The rent would be in consideration of the city tax revenues lost since World War I. The Port Authority also agreed to accept responsibility for property maintenance. Hoboken did not act on this proposal, and it was put aside in 1948.

In 1952, Hoboken and the Port Authority studied and revised the proposal. First consideration was given to rehabilitating and rebuilding the terminals and piers, in order to revive Hoboken's waterfront and provide efficient peacetime facilities for the U.S. Merchant Marines. A 50-year lease was drawn. It was signed on September 24, 1952, by the Maritime Administration of the U.S. Department of Commerce, the City of Hoboken, and the Port of New York Authority. In the event of national emergency, the government could take over the piers because Hoboken was still considered a significant defense port. The lease empowered the Port Authority to rehabilitate and develop the site as a break bulk cargo and passenger terminal. The Port Authority assumed operations and maintenance on October 1, 1952.

Any changes made between 1917 and 1952 to the pier buildings' exteriors and interiors by the armed forces and the U.S. Shipping Board-Maritime Commission-Maritime Administration are no longer evident. The 1921 and 1944 fires destroyed nearly a third of the terminal and three piers, and the Port Authority renovated and rehabilitated the remaining headhouse in the mid-1950's and later.

The property included the former North German Lloyd terminal and Piers 1, 2, and 3 and the rectangular polychrome brick Hamburg-American terminal, sometimes referred to as Headhouse 4 in 1950's Port Authority records. The Port Authority made plans to replace two of the piers. The three older piers were maintained until construction began on the first new pier.

Cargo Pier A was completed on the earlier location of Piers 5 and 6 in 1955. The single-story pier had a steel frame and concrete construction. It was 328 feet wide and approximately 698 feet long.

In 1955, the old Pier 2 was destroyed by fire. The ruins and Pier 1 were removed and replaced by Cargo Pier C, which was built with the same materials and dimensions as Pier A. These were the widest piers in the New York area at the time.

As described above, numerous exterior and interior features of the former North German Lloyd and Hamburg-American terminals were replaced or altered as the Port Authority modernized and rehabilitated them. The revitalized piers provided employment and revenue for Hoboken. The Port Authority subleased the pier facility to private cargo and passenger shipping companies and stevedoring and ship repair businesses, such as Boise-Griffin, American Export Lines, and the Pittston Stevedoring Company. The Hudson River location, close to the railroad and its major west and south connections, provided ideal shipping conditions. Despite the modernizations and conditions, however, the piers were never as busy as they were before or during the wars. Costs involved in shipping, especially with the stevedore services, were expensive and rising with union demands. Rail and truck container shipping competed with the costs and inconveniences of break bulk shipping and the new technology eventually

overtook it. The pier facility became outdated because it was not modernized for container shipping.

The headhouse was occupied until 1975 by private companies associated with the shipping industry. After this time, the number of headhouse tenants decreased because the facility was outdated. Piers B and C and headhouse Section B-C were closed. Port Authority staff and certain private tenants occupied the southern headhouse, particularly Section A, until 1985. At that time, structural problems in Section A required that the building be vacated. The entire headhouse has been unoccupied since 1985.

The Port Authority and the City of Hoboken have reviewed alternative uses for the waterfront property and buildings. In January, 1984, the U.S. Maritime Administration transferred ownership of the pier property to the City of Hoboken.

End Notes

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11. "View of Dock Fronts," Hoboken, Nelson's International Series of Souvenir Books (Portland, Maine: L.H. Nelson Co., 1906).
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13. Aerial photograph of Hoboken piers, view to northwest. Believed to be from the 1930's, photographer and source unknown. Enlarged to poster-size. Port Authority files, Hoboken, N.J.
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19. "View of Dock Fronts," Hoboken, 1906.
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